

Fig. 1

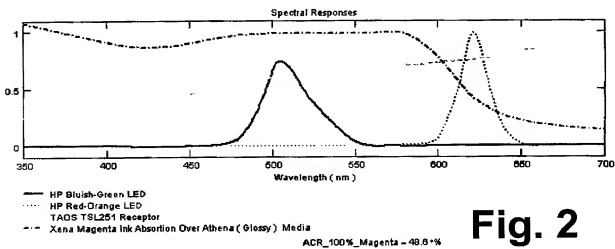


Fig. 2

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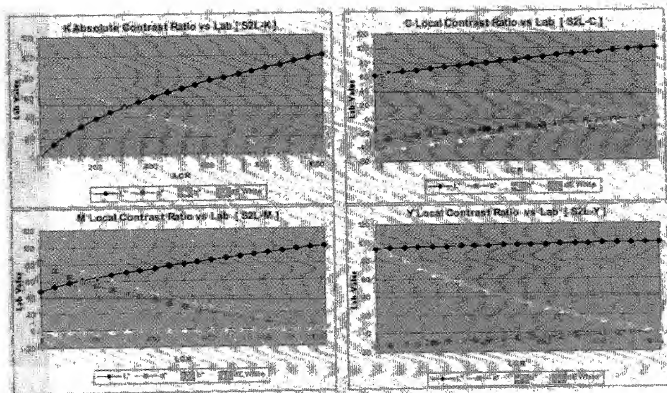


Fig. 3

Fig. 4

The diagram illustrates the architecture of an integrated circuit (1) for color calibration and printing. The process begins with an **image data input** (70) entering the **integrated circuit(s)** (1). The data flows through several processing stages:

- contrast and color adjustm.t. or correct'n** (76)
- rendition, scaling, etc.** (74)
- printmasking stage** (75)
- specific pass & nozzle asgmts.** (61)
- final output stage** (78)

Simultaneously, a **color-calibrating processor portions** (79) block handles calibration tasks:

- sensor-to-LAB calibration** (62) receives **sensor calibration data** (64) and performs **reading/interpretation of preprinted, prelinearized test pattern for single medium** (63).
- system linearization** (83) performs **reading/interpretation of just-printed (preliminarily linearized) test pattern for each printing medium to be used** (84) and applies a **linearization function** (85).
- array-using means, to print test pattern for each print medium** (80) is connected to the linearization function (85) and the final output stage (78).

nonvolatile memory (66) stores **transfer-function data** (86) and provides data to the contrast and color adjustment stage (76) and the specific pass & nozzle assignment stage (61).

The **final output stage** (78) drives the **printing stage** (237), which includes a **print head** (237) with nozzles (235, 236) and a **print medium** (242). The printing stage is connected to the final output stage (78) via a **data bus** (237A, 237B).

Fig. 4